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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,147	10/14/2003	Dan DeLessert	PI-30075	6211

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EXAMINER
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HAMMOND, BRIGGITTE R

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/686,147	<b>Applicant(s)</b> DELESSERT ET AL.	
	<b>Examiner</b> Brigitte R. Hammond	<b>Art Unit</b> 2833	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/30/05.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) ~~1-10~~ 17-19, 21-26, 28 and 29 is/are rejected.
- 7) ☒ Claim(s) ~~1-10~~ 20 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 12, 14, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calma et al. in view of Baur et al. 5,046,968. Regarding claim 11, Calma disclose an electrical connector 10 comprising a body 4, a plurality of probes 30 connected to the body, each probe having a spring biased pin with a metal contact tip 18. Calma does not disclose each pin including an electrical component proximate the tip and serially intervening between the tip and an opposed end of the pin. However, Baur et al. discloses a connector having pins, wherein each pin includes an electrical component 32 proximate the tip and serially intervening between the tip and an opposed end of the pin. It would have been obvious to one of ordinary skill to modify the connector of Calma by providing each pin with an electrical component between the tip and an opposed end of the pin to guard against over voltages etc. as taught by Baur.

Regarding claim 14, each pin is received in a sleeve 36 mounted electrically connected to a conductor 31 on the body, and wherein each pin axially reciprocates with in the sleeve.

Regarding claim 15, Baur et al. the component being between the first and second portions.

Regarding claim 17, second portions each have a flange, the flanges being spaced apart and connected to the electrical component.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hadwin et al. 4,739,259 in view of Baur et al. 5,046,968. Regarding claim 21, Hadwin et al. disclose an electrical probe 12 comprising: a conductive sleeve 44 defining a bore; a probe pin received in the bore; the probe pin having a free end contact tip 30 extending in a first direction; the probe pin being biased (spring loaded) in the first direction. Hadwin et al. do not disclose the probe pin including a capacitor. However, Baur et al. discloses a connector having pins, wherein each pin includes an electrical component 32 (diode, resistor, capacitor or the like). It would have been obvious to one of ordinary skill to modify the connector of Hadwin by providing each pin with a capacitor to guard against over voltages etc. as taught by Baur.

Regarding claim 22, the probe pin includes a resistor having substantially greater resistance than the pin (col. 2, lines 60-65).

Regarding claim 23, the capacitor is connected in parallel with the resistor.

Claims 13,16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calma et al. and Baur et al. in view of Bender et al.

Regarding claim 13, Neither Baur et al. nor Calma et al. disclose the component being a capacitor and resistor in parallel. However, Bender et al. teach the combination of a capacitor and resistor in parallel. It would have been obvious to one of

ordinary skill to modify the connector of Calma et al. by providing a capacitor and resistor in parallel to compensate frequency as taught by Bender et al.

Regarding claim 16, neither the first and second portions of Calma et al. or Baur are insulated. However, Bender et al. discloses first and second portions electrically isolated by insulator 22. Therefore, it would have been obvious to one of ordinary skill to modify the connector of Calma et al. by providing the first and second portions with an insulator for electrical insulation as taught by Bender et al.

Regarding claim 18, the above mentioned limitations are not patentably significant since they relate to the size of the article under consideration which is not ordinarily a matter of invention. In re Yount, 36 C.C.P.A. (Patents) 775, 171 F. 2d 317, 80 USPQ 141.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calma et al. and Baur as applied to claim 15 above, and further in view of Hadwin et al. 4,739,259. Calma et al. disclose the probes being arranged at a first pitch distance. Neither Calma et al. nor Baur et al. disclose the second portion of the pin having a length less than the first pitch distance. However, Hadwin et al disclose a pin probe having first and second portions 30,28 respectively, wherein the second portion of the pin has a length less than the first pitch distance between probes 12,14.

Claims 24,25,28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hadwin et al. in view of Baur et al. Hadwin et al. discloses the invention substantially as claimed. Hadwin et al. do not disclose the electrical component being connected between the first and second portions. However, Bender

et al. discloses a probe 10 having electrical components (col. 2, lines 50-58) serially intervening between a first portion 16 and a second portion 21 of a pin. Therefore, it would have been obvious to one of ordinary skill to modify the probe pin of Calma et al. by providing an electrical component between the first and second portions of the pin as taught by Baur et al. to minimize stray capacitance effects.

Regarding claim 25, Bender et al. discloses first and second portions electrically isolated by insulator 22. Therefore, it would have been obvious to one of ordinary skill to modify the probe of Hadwin et al. by providing the first and second portions with an insulator for electrical insulation as taught by Bender et al.

Regarding claims 28 and 29, Hadwin and Baur et al. disclose the invention substantially as claimed except for the second portion of the pin having a length less than double its diameter or less than 0.50 inch. However, it would have been obvious to one of ordinary skill to modify the probe pin of Hadwin by providing the second portion of the pin having a length less than double its diameter or less than 0.50 inch or any other size for design specifics for a client, *since it has been held that the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.*

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hadwin et al. and Baur et al. as applied to claims 5 and 24 above, and further in view of Calma et al. Hadwin et al. nor Baur et al. disclose the first and second portions each having a flange. However, Calma et al. disclose a probe pin with first and second portions 19,22 each having a flange (not numbered, see fig.2, area between 18 and 19' and

area between 11 and 22), the flanges being spaced apart and connected (electrically) to the electrical component 8. Therefore, it would have been obvious to one of ordinary skill to modify the probe of Hadwin et al. and Baur et al.

***Allowable Subject Matter***

Claims 1-10 are allowed.

Claims 12, 20 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including **all** of the limitations of the base claim and any intervening claims.

Regarding claim 12, the prior art does not disclose each of the tips extending beyond a periphery of the pcb.

***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:00.

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76Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brigitte R. Hammond  
Primary Examiner  
Art Unit 2833

March 20, 2006